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L8: Entry 1 of 11 File: USPT

DOCUMENT-IDENTIFIER: US 6150086 A
TITLE: Encapsulation of oleophilic substances and compositions produced thereby

Brief Summary Text (6):
The prior art, as represented by Lim, et al., U.S. Pat. No. 4,389,419, issued Jun. 21, 1983, the contents of which are herein incorporated by reference, describes the formation of an emulsion consisting of a continuous phase aqueous solution of an alkali metal alginate, and optionally, a water-soluble alcohol-insoluble filler such as a polysaccharide, and a dispersed phase of an oleophilic substance. The emulsion thus produced is then formed into droplets which are emersed into an alcoholic solution of multi-valent cations, to produce a water-insoluble shape-retaining alginate matrix filled with precipitated polysaccharide and enclosing plural oil droplets.

Brief Summary Text (14):
As with the first method, the primary polymer is usually a cellulose, such as methylcellulose and hydroxypropyl methylcellulose. The secondary polymer is generally a cellulose, cellulose derivative, maltodextrin, such as a maltodextrin having a dextrose equivalent value of about 18, alginate, calcium lactate, acacia, gelatin, such as fish gelatin, or modified starch, such as hydroxypropyl starch or pregelatinized corn starch.

Detailed Description Text (13):
Secondary and tertiary polymers are typically celluloses (e.g., methylcellulose or hydroxypropyl methylcellulose), cellulose derivatives (e.g., hydroxypropyl methylcellulose phthalate), alginates (e.g., sodium alginate or propylene glycol alginate), modified starches (e.g., pregelatinized corn starch or hydroxypropyl starch), calcium lactate, gelatins (e.g., fish gelatin), maltodextrins (e.g., dextrin having about 18 dextrose equivalent value, D.E.=18), or acacias. The final mixture may be sprayed dried or processed by any suitable drying techniques to powder or beadlet form which has high potency, is dry and free-flowing, and is suitable for tableting or encapsulation within soft or hard gelatin capsules. Such powders may also be used in food, animal feed, or other pharmaceutical applications, such as premix, suspension and emulsion.

Detailed Description Text (45):
High Potency Vitamin E Acetate Using Methocel E15LV as the Primary Polymer and Fish Gelatin, Maltodextrin, Pregelatinized Corn Starch, Calcium Lactate, or Hydroxypropyl Starch as the Secondary Polymer

Detailed Description Paragraph Table (9):

INGREDIENTS	75% E Vitamin E Acetate	75 Methocel E15LV	75	75	75	75% E Hydroxy-propyl Methocel E15LV	75% E Fish Gelatin	75% E Maltrin M180.sup.1	75% E Pregelatinized Corn Starch	75% E Calcium Lactate	75% E Hydroxypropyl Starch
	16.7	16.7	16.7	16.7	16.7	8.3	--	--	--	--	8.3
	--	--	--	--	8.3	--	--	--	8.3	--	--
	--	--	--	--	8.3						

.sup.1 Brand of maltodextrin (D.E. = 18).

CLAIMS:

7. The method of claim 4, wherein the secondary polymer is a gelatin which is a fish gelatin.